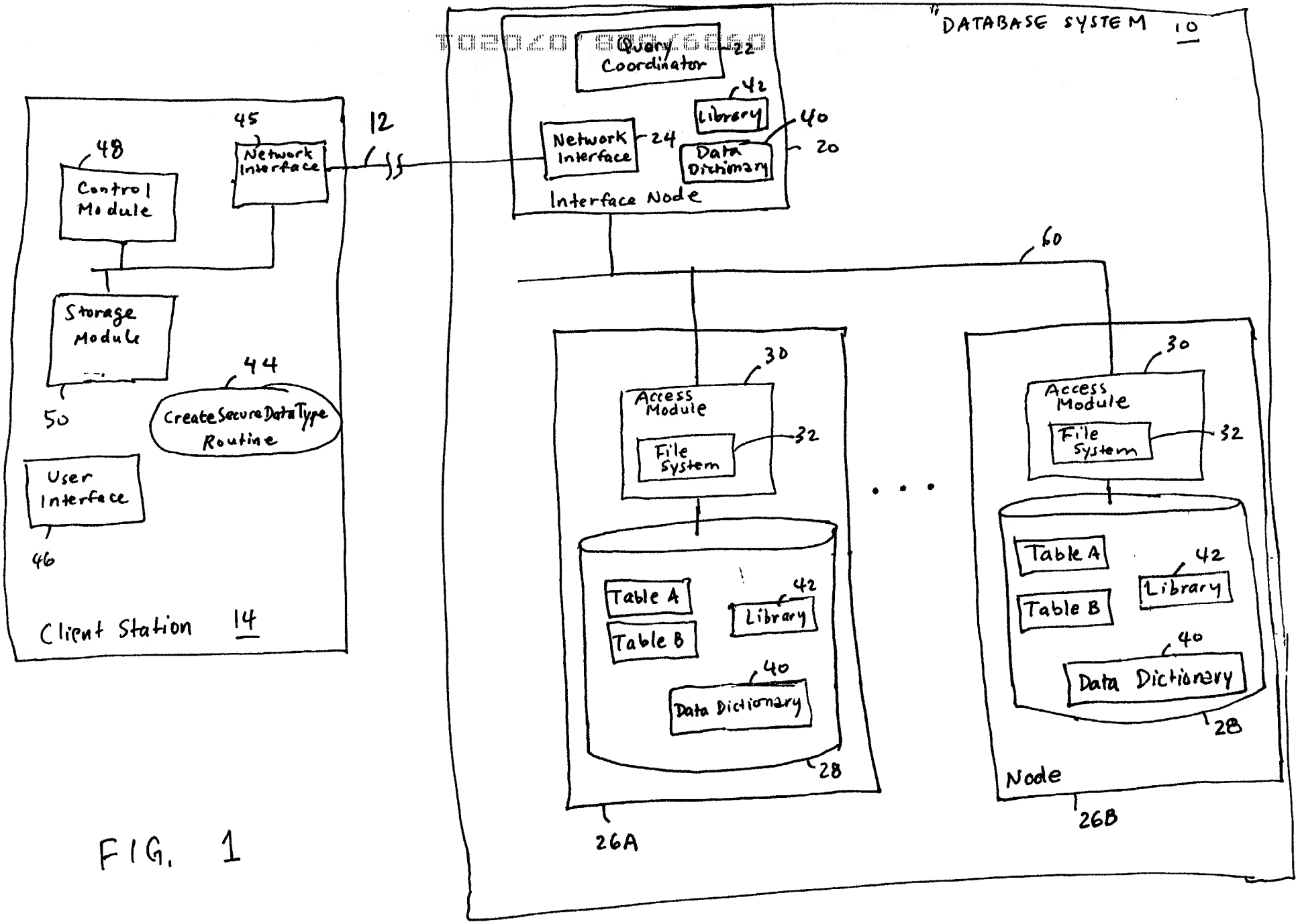
DATABASE SYSTEM 10
Query Coordinator
22
42
Library
40
Network Interface
24
Data Dictionary
20
Interface Node
12
45
Network Interface
48
Control Module
Storage Module
50
44
CreateSecureDataType Routine
User Interface
46
Client Station 14
60
30
Access Module
File System
32
Table A
Table B
42
Library
40
Data Dictionary
28
26A
30
Access Module
File System
32
Table A
Table B
42
Library
40
Data Dictionary
28
Node
26B

FIG. 1

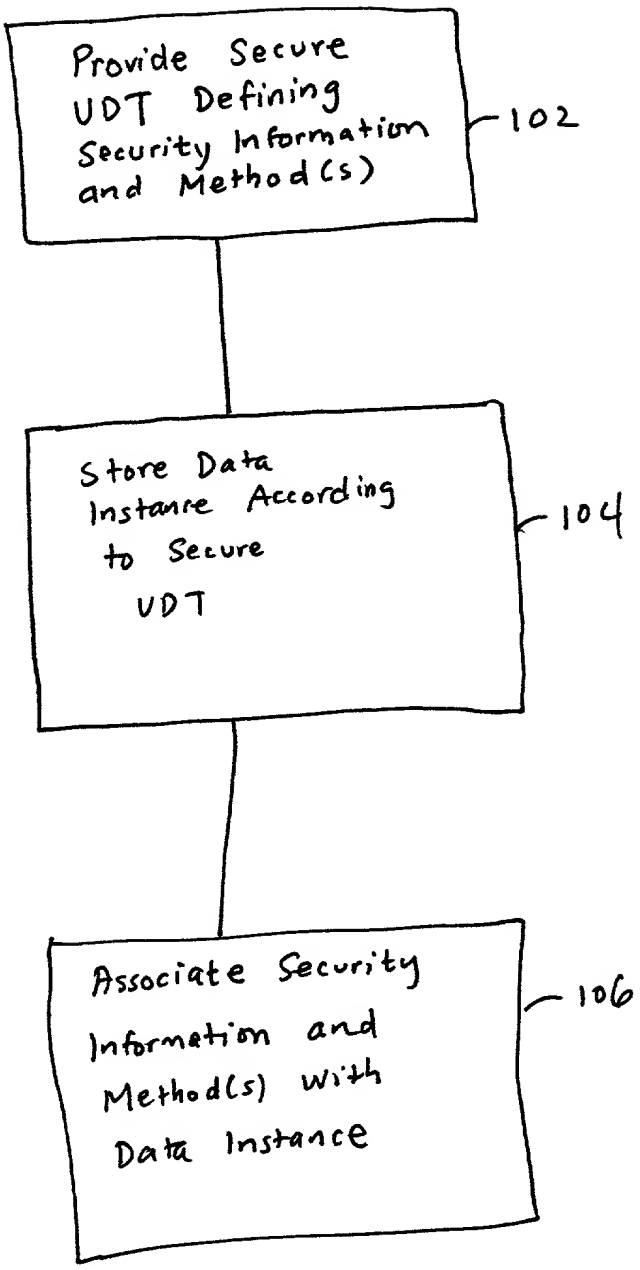
Provide Secure UDT Defining Security Information and Method(s)
102
Store Data Instance According to Secure UDT
104
Associate Security Information and Method(s) with Data Instance
106

FIG. 2

T0820 "8926860

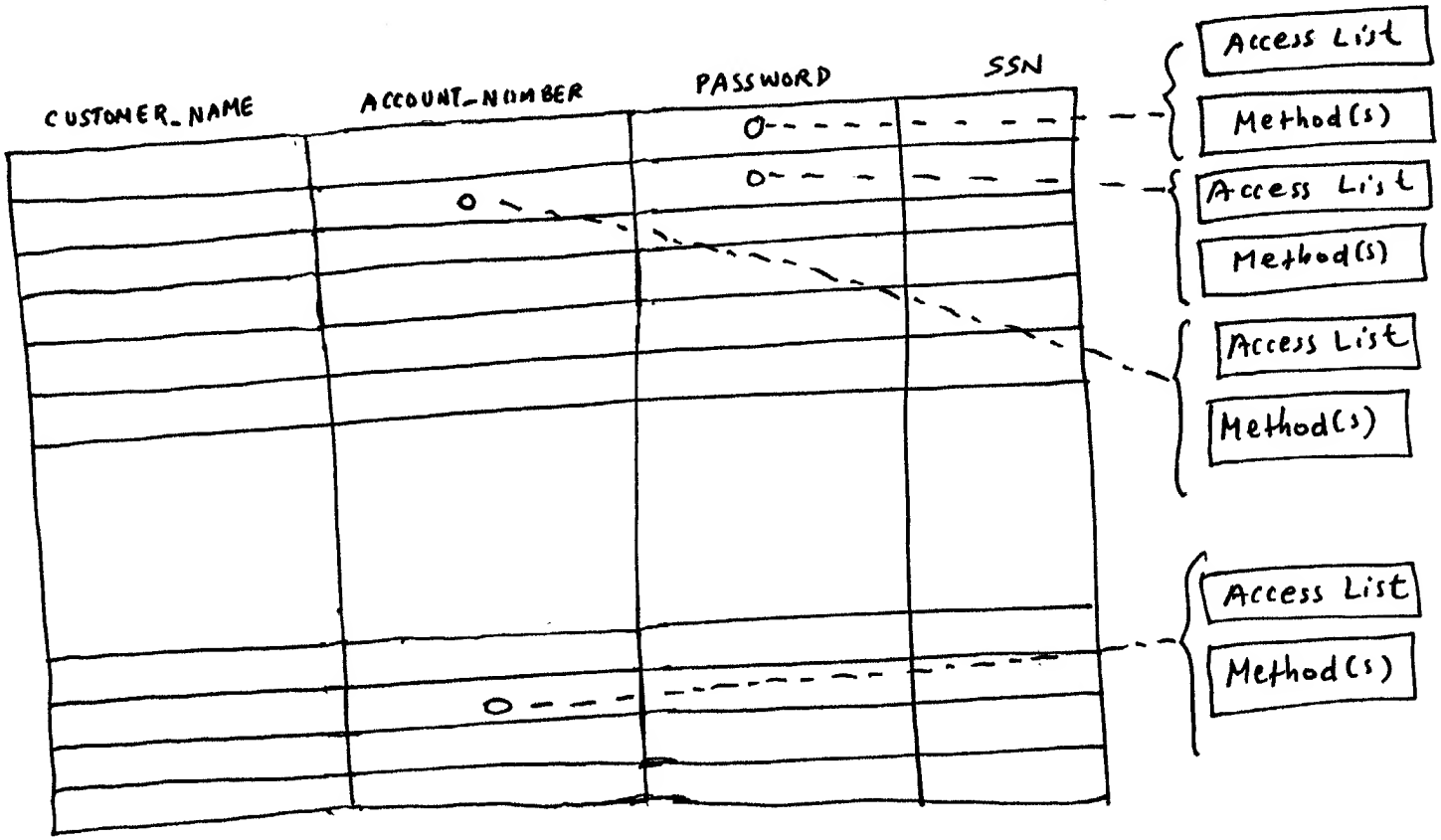

FIG. 3

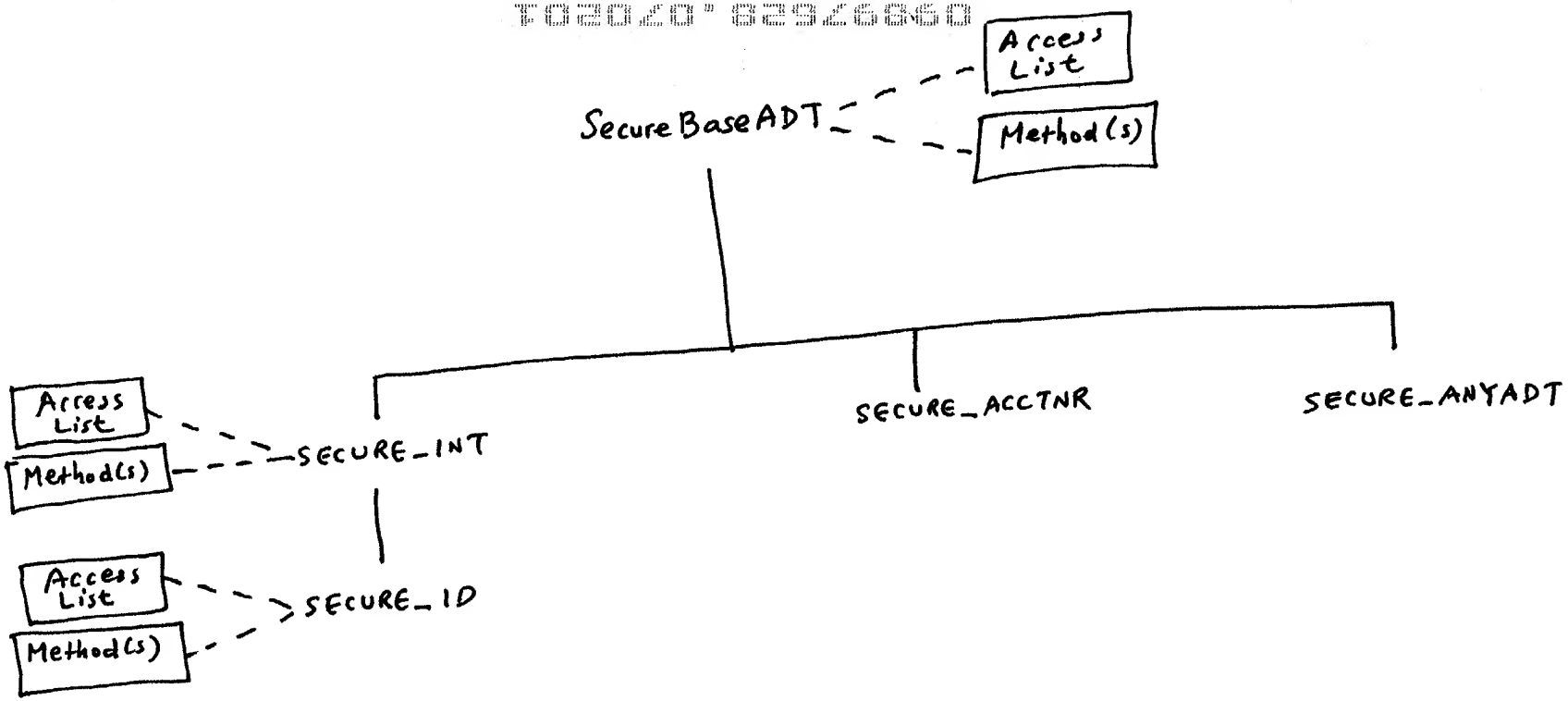
Access List
SecureBaseADT
Method(s)
Access List
Method(s)
SECURE_INT
SECURE_ACCTNR
SECURE_ANYADT
Access List
Method(s)
SECURE_ID

FIG. 4

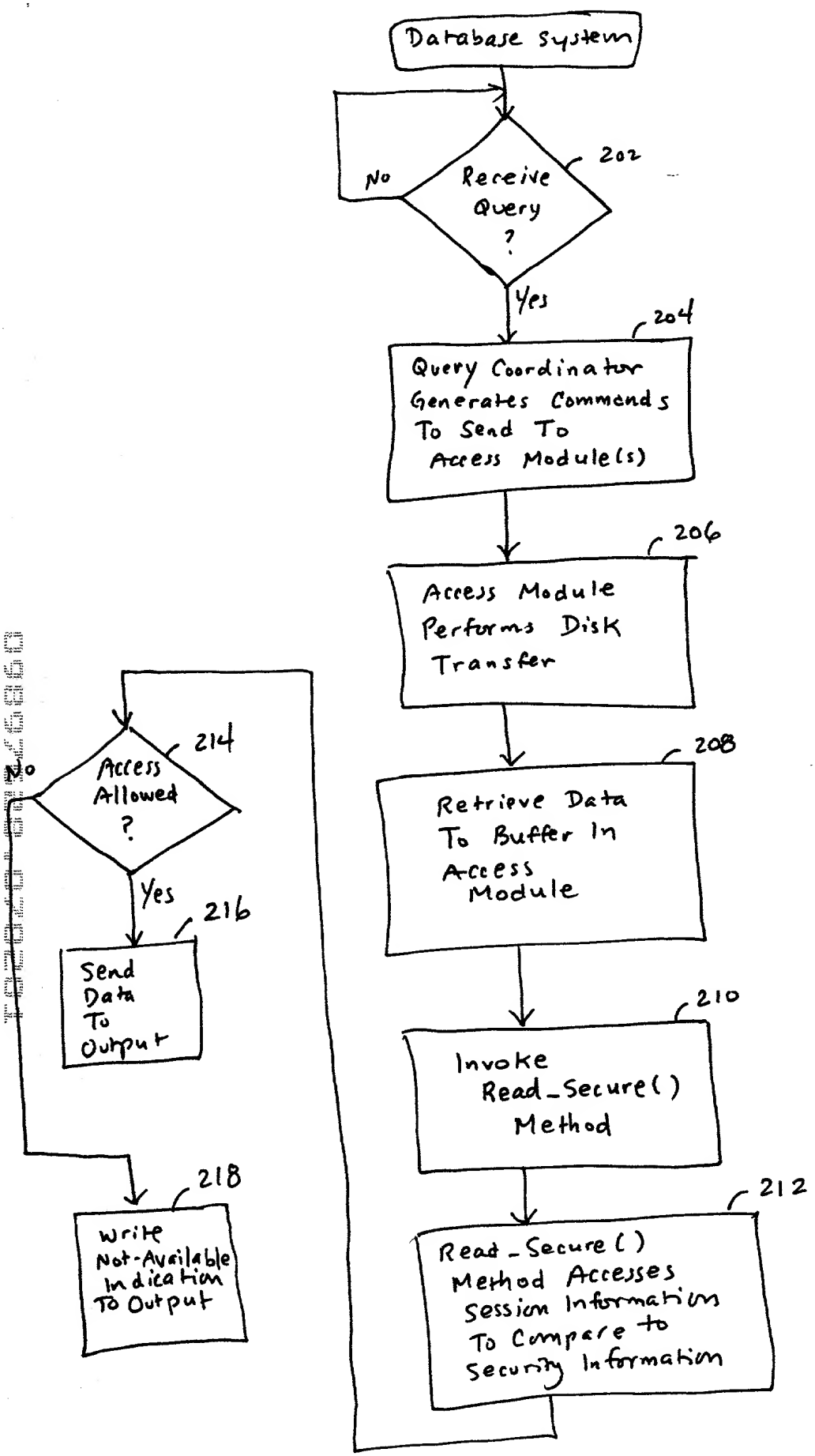
Database system
202
Receive Query ?
No
Yes
204
Query Coordinator Generates Commends To Send To Access Module(s)
206
Access Module Performs Disk Transfer
208
Retrieve Data To Buffer In Access Module
210
Invoke Read_Secure() Method
212
Read_Secure() Method Accesses Session Information To Compare to Security Information
214
Access Allowed ?
No
Yes
216
Send Data To Output
218
Write Not-Available Indication To Output

FIG. 5